Protocol Information

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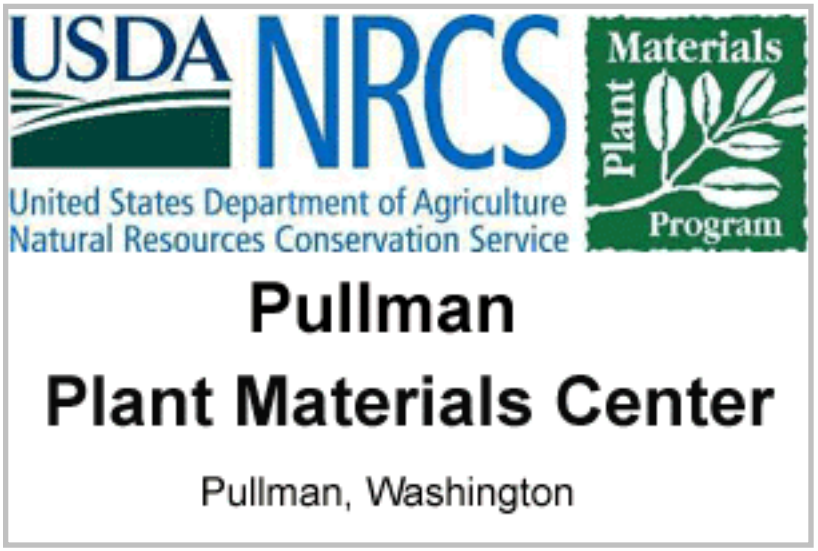

Family Scientific Name:	**Poaceae**
Family Common Name:	**Grass**
Scientific Name:	***Deschampsia caespitosa* (L.) Beauv. ' '**
Common Synonym:	***Deschampsia cespitosa* (L.) Beauv. ' '**
Common Name:	**Tufted hairgrass**
Species Code:	**DECA18**
Ecotype:	**near Moscow, Idaho**
General Distribution:	**Widespread in temperate portions of North America, Europe, Asia, Africa, and South America. In North America it is found where soils are wet at least early in the growing season. It ranges from coastal marshes to alpine meadows from Alaska south to California and east to Maine, except the central and southern Great Plains and the southeastern US. Wetland indicator status is**

	FACW (US Fish and Wildlife Service 1988).
Known Invasiveness:	
Propagation Goal:	**Plants**
Propagation Method:	**Seed**
Product Type:	**Container (plug)**
Stock Type:	**10 cu. in.**
Time To Grow:	**4 Months**
Target Specifications:	**Tight root plug in container.**
Propagule Collection:	**Seed ripens in late June or early July in the Pullman area. It is collected when the inflorescence begins to dry and the seed is in the soft to hard dough stage but before it shatters from the inflorescence. Seed can be stripped from the inflorescence or the inflorescence can be clipped from the plant. Harvested seed is stored in paper bags at room temperature until cleaned.**
Propagule Processing:	**Seed is grayish brown in color. Small amounts are rubbed to free the seed, then cleaned with an air column separator. Larger amounts are threshed with a hammermill, then cleaned with air screen equipment. Processing seed with a hammermill or a debearder will facilitate seed flow through cleaning equipment. Clean seed is stored in controlled conditions at 40 degrees Fahrenheit and 40% relative humidity.**
	1,500,000 seeds/lb (USDA 2006). **1,250,000 to 1,500,000 seeds/lb (Hassell 1996).**

Pre-Planting Treatments:	**Dormancy is sometimes encountered and may vary by ecotype.** **Laboratory germination is best with gibberillic acid and a 5 day prechill at 5 degrees centigrade (Chirco & Turner 1986). Cold storage and light may enhance germination (Walsh 1995). Seed from an Oregon alpine source required cool, moist stratification (Kaye 1997), while seed from a Colorado alpine environment germinated best at alternating temperatures without pretreatment (Sayers & Ward 1966). They also reported light to enhance germination. Seed from western Oregon requires no stratification (Rose et al 1998).** **Seed of the Moscow ecotype germinates well in the dark without pretreatment. 99% of the containers had at least one plant and many containers had to be thinned.**
Growing Area Preparation/ Annual Practices for Perennial Crops:	**In January seed is sown in the greenhouse in 10 cu. in. Ray Leach Super cell conetainers filled with Sunshine #4 and covered lightly. Head space of ¼ to ½ inch is maintained in conetainers to allow deep watering. A thin layer of pea gravel is applied to prevent seeds from floating. Conetainers are watered deeply.**

Establishment Phase:	**Medium is kept moist until germination occurs. Germination usually begins in 7 days and is complete in 12 days.**
Length of Establishment Phase:	**2 weeks**
Active Growth Phase:	**Plants are watered deeply every other day and fertilized once per week with a complete, water soluble fertilizer containing micro-nutrients. Plants may require water every day during the final part of the active growth period.**
Length of Active Growth Phase:	**3 months**
Hardening Phase:	**Plants are moved to the cold frame in late March or early April, depending on weather conditions. They are watered every other day if the weather is cool, and every day during hot, dry spells.**
Length of Hardening Phase:	**2-4 weeks**
Harvesting, Storage and Shipping:	
Length of Storage:	
Outplanting performance on typical sites:	**Transplanting is done in late April or early May by using an electric drill and portable generator to drill 1.5 inch diameter holes at the planting site. Survival in seed increase plantings without competing vegetation approaches 100%. Transplanting into sites with existing vegetation may reduce survival and vigor depending on weather conditions following planting. Flowering and seed production occurs the year after transplanting.**
Other Comments:	

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